

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

02/09/2004
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Claims 1-14. (Canceled):

Claim ~~15~~.¹ (Currently amended): A pressure treatment apparatus for processing ~~a treatment object including~~ a solid waste, comprising:

an exterior vessel:

a pressure reactor installed inside the exterior vessel with a gap therebetween;

means for feeding ~~a treatment object including~~ a solid waste by using gravity into the pressure reactor, ~~wherein the means for feeding the treatment object comprises the~~ solid waste comprising:

primary crushing means for crushing the solid waste,

a first solid reservoir for receiving primary crushed solid waste and

a second solid reservoir which is connected to the first solid reservoir through a first connecting pipe and connected to the pressure reactor through a second connecting pipe[(:)],

wherein the first connecting pipe provides a first sealing unit and the second connecting pipe provides a second sealing unit, wherein at least the first sealing unit, the first connecting pipe, which is downstream from the first sealing unit, the second solid reservoir, the second connecting pipe, the second sealing unit, and the pressure reactor have a pressure resistant structure;

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a pressure fluid feeder for feeding a first pressure fluid into the second solid reservoir and a second pressure fluid into the second connecting pipe between the second sealing unit and the pressure reactor;

means for feeding a reaction medium into the pressure reactor ~~[[, and]]~~ ;

means for feeding a third pressure fluid into the gap; and

~~means for controlling pressure within a gap between the exterior vessel and the pressure reactor to be higher than that within the pressure reactor, of the first, second, and third pressure fluids and a pressure within the pressure reactor such that the pressure of the first pressure fluid is higher than the pressure of the second pressure fluid, the pressure of the second pressure fluid is higher than the pressure within the pressure reactor and the pressure of the third pressure fluid is higher than the pressure within the pressure reactor,~~ wherein the exterior vessel is isolated from the ~~treatment object~~ solid waste and the reaction medium.

Claim 16. (Canceled):

Claim ~~17~~²₁ (Previously presented): The pressure treatment apparatus as set forth in claim ~~16~~¹, further comprising means for controlling temperature of the exterior vessel to be lower than that of the pressure reactor.

Claim ~~18~~³₁ (Previously presented): The pressure treatment apparatus as set forth in claim ~~16~~¹, wherein the exterior vessel comprises a trunk portion and a cover portion that opens and shuts, the pressure reactor being fixed to be removable to the exterior vessel.

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Claim ~~18~~⁴. (Previously presented): The pressure treatment apparatus as set forth in claim ~~15~~¹, wherein the pressure reactor is formed of at least one material selected from a group consisting of austenite stainless steel, Ni, Zr, Ti, Ta, Au, Pt, and alloys thereof.

Claim ~~20~~⁵. (Previously presented): The pressure treatment apparatus as set forth in claim ~~15~~¹, wherein an inner surface of the pressure reactor is lined with at least one material selected from a group consisting of austenite stainless steel, Ni, Zr, Ti, Ta, Au, Pt, and alloys thereof.

Claim ~~21~~⁶. (Previously presented): The pressure treatment apparatus as set forth in claim ~~15~~¹, wherein an inner surface of the pressure reactor is coated by ceramic material by thermally spraying.

Claims 22-25. (Canceled):

Claim ~~26~~⁷. (Currently amended): The pressure treatment apparatus as set forth in claim ~~[[16]] 15~~¹, wherein the ~~pressure holding~~ third pressure fluid is pressurized water.

Claim 27. (Canceled):

Claim ~~28~~⁸. (New): The pressure treatment apparatus as set forth in claim ~~15~~¹, wherein the first sealing unit comprises a first reciprocating switchgear and the second sealing unit comprises a second reciprocating switchgear.

Claim ~~29~~⁹. (New): The pressure treatment apparatus as set forth in claim ~~15~~¹, wherein the means for feeding a reaction medium comprises means for feeding a super-critical water into the pressure reactor.

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¹⁰
Claim ~~30~~ (New): The pressure treatment apparatus as set forth in
⁹
claim ~~29~~, wherein the means for feeding a super-critical water comprises a pump and a
pre-heater.

¹¹
Claim ~~31~~ (New): The pressure treatment apparatus as set forth in
⁹
claim ~~29~~, wherein the means for feeding a reaction medium further comprises means for
feeding hydrogen peroxide into the pressure reactor.

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